

# SunSet™ xDSL

Aug 1997

what kind of line protection?  
 CE approvals - directives  
 Need a product definitions, labels, screens,  
 TDR implementation, ADSL  
 presentation  
 we need to plan our equipment development rev. A  
 neg. ts w/ Alcatel

SUNRISE TELEC  
INCORPORATED

## PRELIMINARY SPECIFICATIONS

### CONNECTORS

ADSL interface: RJ45 and Bantam.  
 POTS interface: RJ11 handset.  
 Serial Port - 8 pin Mini DIN RS232C (V.24), DTE.  
 DC power jack.

### DIGITAL DMM

#### DCV

0 - 350V full-scale measurement  
 0 - 4V range, +/- 15 mV  
 0 - 40V range, +/- 150 mV  
 0 - 350V range, +/- 1.5V

#### ACV

0 - 275 VAC full-scale measurement  
 From 50 - 500 Hz  
 0 - 4V range, +/- 25 mV  
 0 - 40V range, +/- 250 mV  
 0 - 275V range, +/- 2.5V  
 From 500 Hz - 1 kHz  
 0 - 4V range, +/- 87 mV  
 0 - 40V range, +/- 870 mV  
 0 - 275V range, +/- 8.7V

#### DCA

0 - 400 mA full-scale measurement  
 0 - 40 mA range, +/- 230  $\mu$ A  
 0 - 400 mA range, +/- 2.3 mA

#### ACA

0 - 400 mA full-scale measurement  
 From 50 - 500 Hz  
 0 - 40 mA range, +/- 430  $\mu$ A  
 0 - 400 mA range, +/- 4.3 mA

#### Resistance

0.1 ohm - 10 Mohm full-scale measurement  
 0.1 - 400 ohm range, +/- 4.7 ohm  
 0.1 - 4 kohm range, +/- 27 ohm  
 0.1 - 40 kohm range, +/- 270 ohm  
 0.1 - 400 kohm range, +/- 4 kohm  
 0.1 - 4 Mohm range, +/- 150 kohm  
 0.1 - 10 Mohm range, +/- 800 kohm

#### Capacitance

10 pF - 40  $\mu$ F full-scale measurement  
 10 pF - 4 nF range, +/- 85 pF  
 10 pF - 40 nF range, +/- 850 pF  
 10 pF - 0.4  $\mu$ F range, +/- 8.5 nF  
 10 pF - 4  $\mu$ F range, +/- 85 nF  
 10 pF - 40  $\mu$ F range, +/- 850 nF

### DIGITAL TIMS

Wideband TIMS: 10 kHz to 1.5 MHz

Resolution: 375 Hz

#### Level

Tx: -30 to 16 dBm

Rx: -60 to 14 dBm

Flatness: 0.1 dB

probably wrong

Output Impedance: 100 ohm

Signal to Noise (S/N) measurement - what Frequencies?

Please provide me with fixed brick  
 by 9/22/97 meeting.  
 G: jz

### TDR

#### Range\*

10 - 22,000 ft for 22 AWG  
 10 - 18,000 ft for 24 AWG  
 10 - 12,000 ft for 26 AWG

#### Pulse

1/2 square wave

#### Amplitude

5 Vpp into 100 ohm  
 10 Vpp into open circuit

#### Width

20 ns - 5 us

Adjustable velocity: 0.4 to 0.99

Output Impedance: 100 ohm

#### Accuracy

10 - 1000 ft, +/- 4 ft

1000 - 22,000 ft, +/- 6 ft

Display results to LCD screen.

Store 3 previous test results in graphical format.

\* Dependent upon condition of wire and the number of bridge taps

### ALCATEL ADSL PLUG-IN MODULE

Alcatel 3.0 chip set implementation.

Establish ADSL link with far end modem.

Up/down stream bit rate verification and BERT test.

IEEE 743 F & G filter noise measurement

Signal to Noise (S/N) measurement

Other modules to be announced.

RCP  
 PM  
 K.C.C  
 TD  
 RK  
 VW  
 CLW  
 MM  
 SG  
 RC  
 IP

our design

1/2

D

# SunSet™ xDSL



## POTS SPLITTER EMULATION

Emulate POTS splitter applications.

Provide direct handset interface/built-in hook control.  
POTS shunt circuit on/off control.

*no longer in there*

## GENERAL

Size: 10.5 x 6 x 27 cm (4 x 2.4 x 10.5")

Weight: 1.3 Kg (2.8 lb)

Construction: PC+ABS high-impact plastic.

Display: 32x16 graphic LCD with backlight.

18 bi-color LEDs.

Battery: Rechargeable, field-replaceable NiMH pack.

Provides 5 hrs of continuous use (nominal).

Charger: Universal design with IEC power cable connector.  
11 x 6 x 3.5 cm (4.3 x 2.4 x 1.4") with 122 cm (4') extension cable attached.

9.75 oz.

100 VAC - 240 VAC input.

15 VDC, 2A output.

Fast recharge in 3 hours (nominal).

UL, CSA, CE approved.

Upgrade options via field-replaceable SunWare™ cartridge.

## ENVIRONMENTAL

Operating temperature: 0 to 50 °C (32 to 122 °F)

Storage temperature: -20 to 70 °C (-4 to 158 °F)

Humidity: 5% to 90% noncondensing

Note: Specifications subject to change without notice.